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|--|---|--|--|--|------------------------------|
| NOTICE OF REVISION (NOR) | | 1. DATE (YYMMDD) 96-03-15 | | Form Approved OMB No. 0704-0188 | |
| THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED. | | | | | |
| <small>Public reporting burden for this collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSED. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/ PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.</small> | | | | | 2. PROCURING ACTIVITY NO. |
| | | | | | 3. DODAAC |
| 4. ORIGINATOR | | b. ADDRESS (Street, City, State, Zip Code) Defense Electronics Supply Center 1507 Wilmington Pike Dayton, OH 45444-5765 | | 5. CAGE CODE 67268 | |
| a. TYPED NAME (First, Middle Initial, Last) | | | | 7. CAGE CODE 67268 | |
| | | | | 6. NOR NO. 5962-R072-96 | |
| | | | | 8. DOCUMENT NO. 5962-88770 | |
| 9. TITLE OF DOCUMENT MICROCIRCUIT, LINEAR, SINGLE POWER MOSFET DRIVER, MONOLITHIC SILICON | | | 10. REVISION LETTER | | 11. ECP NO. N/A |
| | | | a. CURRENT E | b. NEW F | |
| 12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES All | | | | | |
| 13. DESCRIPTION OF REVISION Sheet 1: Revisions ltr column; add "F". Revisions description column; add "Changes in accordance with NOR 5962-R072-96". Revisions date column; add "96-03-15". Revision level block; Add "F". Rev status of sheets; for sheets 1 and 5, add "F". Sheet 5: Table I, Quiescent supply current test, I_{S2} for device types 04 - 07 and group A subgroups 2 and 3, change maximum limit from "0.20 mA" to "0.40 mA".. Revision level block; add "F". | | | | | |
| 14. THIS SECTION FOR GOVERNMENT USE ONLY | | | | | |
| a. (X one) | X | (1) Existing document supplemented by the NOR may be used in manufacture. | | | |
| | | (2) Revised document must be received before manufacturer may incorporate this change. | | | |
| | | (3) Custodian of master document shall make above revision and furnish revised document. | | | |
| b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT DESC-ELDS | | | c. TYPED NAME (First, Middle Initial, Last) Michael A. Frye | | |
| d. TITLE Chief, Microelectronics Branch | | e. SIGNATURE Michael A. Frye | | f. DATE SIGNED (YYMMDD) 96-03-15 | |
| 15a. ACTIVITY ACCOMPLISHING REVISION DESC-ELDS | | b. REVISION COMPLETED (Signature) Sandra Rooney | | c. DATE SIGNED (YYMMDD) 96-03-15 | |

| | | | | | |
|--|---|---|---|--|------------------------|
| NOTICE OF REVISION (NOR) | | 1. DATE (YYMMDD) 96-01-11 | | Form Approved OMB No. 0704-0188 | |
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| | | | | 3. DODAAC | |
| 4. ORIGINATOR | | b. ADDRESS (<i>Street, City, State, Zip Code</i>) Defense Electronics Supply Center 1507 Wilmington Pike Dayton, OH 45444-5765 | | 5. CAGE CODE 67268 | |
| a. TYPED NAME (<i>First, Middle Initial, Last</i>) | | | | 7. CAGE CODE 67268 | |
| 6. NOR NO. 5962-R037-96 | | | 8. DOCUMENT NO. 5962-88770 | | |
| 9. TITLE OF DOCUMENT MICROCIRCUIT, LINEAR, SINGLE POWER MOSFET DRIVER, MONOLITHIC SILICON | | | 10. REVISION LETTER | | 11. ECP NO. N/A |
| | | | a. CURRENT D | b. NEW E | |
| 12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES <div style="text-align: center;">All</div> | | | | | |
| 13. DESCRIPTION OF REVISION Sheet 1: Revisions ltr column; add "E". Revisions description column; add "Changes in accordance with NOR 5962-R037-96". Revisions date column; add "96-01-11". Revision level block; Add "E". Rev status of sheets; for sheets 1, 4, and 5, add "E". Sheet 4: Table I, for input current test I_{IN} , in the conditions column. change from " $-5\text{ V} \leq V_{IN} \leq V_S$ " to " $-5\text{ V} \leq V_{IN} \leq 0\text{ V}$ ". In the device type column change from "02, 07" to "02, 03, 07". Revision level block; add "E". Sheet 5: Table I, for output resistance test, R_{O2} , in the conditions column, change from " $V_{IN} = 2.0\text{ V}$ " to " $V_{IN} = 2.4\text{ V}$ ". Revision level block; add "E". | | | | | |
| 14. THIS SECTION FOR GOVERNMENT USE ONLY | | | | | |
| a. (<i>X one</i>) | X | (1) Existing document supplemented by the NOR may be used in manufacture. | | | |
| | | (2) Revised document must be received before manufacturer may incorporate this change. | | | |
| | | (3) Custodian of master document shall make above revision and furnish revised document. | | | |
| b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT DESC-ELDS | | | c. TYPED NAME (<i>First, Middle Initial, Last</i>) Michael A. Frye | | |
| d. TITLE Chief, Microelectronics Branch | | e. SIGNATURE Michael A. Frye | | f. DATE SIGNED (YYMMDD) 96-01-11 | |
| 15a. ACTIVITY ACCOMPLISHING REVISION DESC-ELDS | | b. REVISION COMPLETED (<i>Signature</i>) Dan Wonnell | | c. DATE SIGNED (YYMMDD) 96-01-11 | |

| REVISIONS | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|-----------------------------------|--|---|---|---|---|--|-----------------|---------------------------|---|-------------------|----|------------|--|--|--|
| LTR | DESCRIPTION | | | | | | | | | | DATE (YR-MO-DA) | | | | | APPROVED | | | |
| C | Redrawn with changes. Add device types 04 and 05. Editorial changes throughout. | | | | | | | | | | 94-03-04 | | | | | M. A. Frye | | | |
| D | Add device types 06 and 07. Editorial changes throughout. | | | | | | | | | | 95-01-18 | | | | | M. A. Frye | | | |
| THE ORIGINAL FIRST PAGE OF THIS DRAWING HAS BEEN REPLACED. | | | | | | | | | | | | | | | | | | | |
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| SHEET | | | | | | | | | | | | | | | | | | | |
| REV STATUS OF SHEETS | | | | REV | | D | D | D | D | D | D | D | D | D | D | D | | | |
| | | | | SHEET | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | | |
| PMIC N/A | | | | PREPARED BY Rick C. Officer | | | | | | DEFENSE ELECTRONICS SUPPLY CENTER DAYTON OHIO 45444 | | | | | | | | | |
| STANDARD MICROCIRCUIT DRAWING THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE AMSC N/A | | | | CHECKED BY Charles E. Besore | | | | | | | | | | | | | | | |
| | | | | APPROVED BY Michael A. Frye | | | | | | | | | | | | | | | |
| | | | | DRAWING APPROVAL DATE 89-08-16 | | | | | | | | | | | | | | | |
| | | | | REVISION LEVEL D | | | | | | SIZE A | | CAGE CODE 67268 | | 5962-88770 | | | | | |
| | | | | | | | | | | SHEET 1 OF 11 | | | | | | | | | |

1. SCOPE

1.1 Scope. This drawing describes device requirements for class B microcircuits in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices".

1.2 Part or Identifying Number (PIN). The complete PIN shall be as shown in the following example:

| | | | |
|----------------|------------------------|-------------------------|--------------------------------|
| 5962-88770 | 01 | H | X |
| Drawing number | Device type (1.2.1) | Case outline (1.2.2) | Lead finish per MIL-M-38510 |

1.2.1 Device type(s). The device type(s) shall identify the circuit function as follows:

| Device type | Generic number | Circuit function | Output |
|-------------|----------------|---|----------|
| 01 | TSC429 | Inverting power MOSFET driver | 4.5 A dc |
| 02 | TSC4429 | Inverting power MOSFET driver | 4.5 A dc |
| 03 | TSC4420 | Noninverting power MOSFET driver | 4.5 A dc |
| 04 | MIC4451 | Inverting hi speed, hi current MOSFET driver | 12 A dc |
| 05 | MIC4452 | Noninverting hi speed, hi current MOSFET driver | 12 A dc |
| 06 | MIC44R21 | Inverting, rad hardened MOSFET driver | 9 A dc |
| 07 | MIC44R22 | Noninverting, rad hardened MOSFET driver | 9 A dc |

1.2.2 Case outline(s). The case outline(s) shall be as designated in MIL-STD-1835 and as follows:

| Outline letter | Descriptive designator | Terminals | Package style |
|----------------|------------------------|-----------|------------------------------|
| H | GDFP1-F10 or GDFP2-F10 | 10 | Flat pack |
| P | GDIP1-T8 or CDIP2-T8 | 8 | Dual-in-line |
| 2 | CQCC1-N20 | 20 | Square leadless chip carrier |

1.2.3 Lead finish. The lead finish shall be as specified in MIL-STD-883 (see 3.1 herein). Finish letter "X" shall not be marked on the microcircuit or its packaging. The "X" designation is for use in specifications when lead finishes A, B, and C are considered acceptable and interchangeable without preference.

1.3 Absolute maximum ratings.

| | |
|---|------------------------------------|
| Supply voltage (V_S) | 20 V dc |
| Input voltage range (V_{IN}): | |
| Device 01 | $V_S + 0.3$ V dc to GND - 0.3 V dc |
| Device 02, 03, 04, 05 | $V_S + 0.3$ V dc to GND - 5.0 V dc |
| Output current (per pin, capacitance load): | |
| Device 01 - 03 | 6.0 A dc |
| Device 04 - 05 | 12.0 A dc |
| Device 06 - 07 | 9.0 A dc |
| Peak supply current or GND current (per pin): | |
| Device 01 - 03 | 6.0 A dc |
| Device 04 - 05 | 12.0 A dc |
| Device 06 - 07 | 9.0 A dc |
| Storage temperature range | -55° C to +125° C |
| Power dissipation (P_D): | |
| Case outline H | 650 mW <u>1/</u> |
| Case outline P | 800 mW <u>2/</u> |
| Case outline 2 | 1.8 W <u>3/</u> |
| Lead temperature (soldering, 10 seconds) | +300° C |
| Junction temperature range (T_J) | -55° C to +150° C |

1/ Derate linearly at 6.5 mW/° C above $T_A = 50^\circ$ C

2/ Derate linearly at 8 mW/° C above $T_A = +50^\circ$ C

3/ Derate linearly at 18 mW/° C above $T_A = +50^\circ$ C

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1.4 Recommended operating conditions.

Supply voltage range $+4.5 \text{ V dc} \leq V_S \leq 18 \text{ V dc}$
Ambient operating temperature range (T_A) $-55^\circ \text{ C to } +125^\circ \text{ C}$

2. APPLICABLE DOCUMENTS

2.1 Government specification, standards, and bulletin. Unless otherwise specified, the following specification, standards, and bulletin of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, form a part of this drawing to the extent specified herein.

SPECIFICATION

MILITARY

MIL-I-38535 - Integrated Circuits (Microcircuits) Manufacturing, General Specification for.

STANDARDS

MILITARY

MIL-STD-883 - Test Methods and Procedures for Microelectronics.
MIL-STD-1835 - Microcircuit Case Outlines.

BULLETIN

MILITARY

MIL-BUL-103 - List of Standard Military Drawings (SMD's).

(Copies of the specification, standards, and bulletin required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing shall take precedence.

3. REQUIREMENTS

3.1 Item requirements. The individual item requirements shall be in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices" and as specified herein. Product built to this drawing that is produced by a Qualified Manufacturer Listing (QML) certified and qualified manufacturer or a manufacturer who has been granted transitional certification to MIL-I-38535 may be processed as QML product in accordance with the manufacturers approved program plan and qualifying activity approval in accordance with MIL-I-38535. This QML flow as documented in the Quality Management (QM) plan may make modifications to the requirements herein. These modifications shall not affect form, fit, or function of the device. These modifications shall not affect the PIN as described herein. A "Q" or "QML" certification mark in accordance with MIL-I-38535 is required to identify when the QML flow option is used.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-STD-883 (see 3.1 herein) and herein.

3.2.1 Case outlines. The case outlines shall be in accordance with 1.2.2 herein.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 1.

3.3 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and apply over the full ambient operating temperature range.

3.4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.

3.5 Marking. Marking shall be in accordance with MIL-STD-883 (see 3.1 herein). The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked as listed in MIL-BUL-103 (see 6.6 herein).

| | | | |
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TABLE I. Electrical performance characteristics.

| Test | Symbol | Conditions -55°C ≤ T _A ≤ +125°C 4.5 V ≤ V _S ≤ 18 V unless otherwise specified | | Group A subgroups | Device Type | Limits | | Unit |
|----------------------------|--------------------------|--|-----------------------|----------------------|-------------------|---------------------------|-------------------------|------|
| | | | | | | Min | Max | |
| Logic "1" input voltage | V _{IH} | | | 1, 2, 3 | 01 - 05 | 2.4 | | V |
| | | | | | 06, 07 | 3.5 | | |
| Logic "0" input voltage | V _{IL} | | | 1, 2, 3 | 01 - 05 | | 0.8 | |
| | | | | | 06, 07 | | 2.0 | |
| Input voltage range | V _{IN} (max) | | | 1, 2, 3 | 1 | 0 | V _S | |
| | | | | 1, 2, 3 | 02, 03, 04, 05 | -5 | V _S + 0.3 | |
| Input current | I _{IN} | 0 V ≤ V _{IN} ≤ V _S | | 1 | All | | ±1 | μA |
| | | | | 2, 3 | | | ±10 | |
| | | -5 V ≤ V _{IN} ≤ V _S | | 1, 2, 3 | 02, 07 | | ±10 | mA |
| High output voltage | V _{OH} | R _L = ∞ 1/ | | 1, 2, 3 | All | V _S - 25 mV | | V |
| Low output voltage | V _{OL} | R _L = ∞ 1/ | | 1, 2, 3 | All | | 25 | mV |
| Output resistance | R _{O1} | V _{IN} = 0.8 V, I _{OUT} = 10 mA | V _S = 18 V | 1 | 01, 03 | | 2.5 | Ω |
| | | | | 2, 3 | | | 5.0 | |
| | | | | 1 | 2 | | 2.8 | |
| | | | | 2, 3 | | | 5.0 | |
| | | | | 1 | 04, 05 | | 1.5 | |
| | | | | 2, 3 | | | 2.2 | |
| | | | | 1 | 06, 07 | | 2.5 | |
| | | | | 2, 3 | | | 3.6 | |

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

| Test | Symbol | Conditions -55°C ≤ T _A ≤ +125°C 4.5 V ≤ V _S ≤ 18 V unless otherwise specified | Group A subgroups | Device Type | Limits | | Unit |
|-----------------------------|-----------------|--|----------------------|----------------------------|--------|------|------|
| | | | | | Min | Max | |
| Output resistance | R _{O2} | V _{IN} = 2.0 V, I _{OUT} = 10 mA | 1 | 01, 02 | | 2.5 | Ω |
| | | | | | | 5.0 | |
| | | | 2, 3 | 03 | | 2.8 | |
| | | | | | | 5.0 | |
| | | | 1 | 04, 05 | | 1.5 | |
| | | | | | | 2.2 | |
| | | V _{IN} = 3.5 V I _{OUT} = 10 mA | 1 | 06, 07 | | 1.7 | |
| | | | | | | 2.7 | |
| Quiescent supply current | I _{S1} | V _{IN} = 3.0 V | 1 | 01 | | 5.0 | mA |
| | | | 2, 3 | | | 12 | |
| | | | 1 | 02, 03 04, 05 06, 07 | | 1.5 | |
| | | | 2, 3 | | | 3.0 | |
| | I _{S2} | V _{IN} = 0.0 V | 1 | 01 | | 0.5 | |
| | | | 2, 3 | | | 1.3 | |
| | | | 1 | 02, 03 | | 0.15 | |
| | | | 2, 3 | | | 0.40 | |
| | | | 1 | 04, 05 06, 07 | | 0.15 | |
| | | | 2, 3 | | | 0.20 | |
| Rise time | t _R | 2/ See figures 2 and 3 V _S = 18 V | 9 | 01 | | 35 | ns |
| | | | | | | 70 | |
| | | | 9 | 02, 03 | | 35 | |
| | | | | | | 60 | |
| | | | 9 | 04, 05 | | 75 | |
| | | | | | | 100 | |
| | | | 9 | 06, 07 | | 75 | |
| | | | | | | 120 | |

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

| Test | Symbol | Conditions -55°C ≤ T _A ≤ +125°C 4.5 V ≤ V _S ≤ 18 V unless otherwise specified | | Group A subgroups | Device Type | Limits | | Unit |
|------------|-----------------|--|----------------------------|----------------------|-------------------|--------|-----|------|
| | | | | | | Min | Max | |
| Fall time | t _F | 2/ See figures 2 and 3 V _S = 18 V | C _L = 2500 pF | 9 | 01 | | 35 | ns |
| | | | | 10, 11 | | | 70 | |
| | | | | 9 | 02, 03 | | 35 | |
| | | | | 10, 11 | | | 60 | |
| | | | C _L = 15,000 pF | 9 | 04, 05 | | 75 | |
| | | | | 10, 11 | | | 100 | |
| | | | C _L = 10,000 pF | 9 | 06, 07 | | 75 | |
| | | | | 10, 11 | | | 120 | |
| Delay time | t _{D1} | 2/ See figures 2 and 3 V _S = 18 V | | 9 | 01, 02, 03 | | 75 | ns |
| | | | | 10, 11 | | | 100 | |
| | | | | 9 | 04, 05, 06, 07 | | 60 | |
| | | | | 10, 11 | | | 80 | |
| | t _{D2} | | | 9 | 01 | | 75 | |
| | | | | 10, 11 | | | 120 | |
| | | | | 9 | 02, 03 | | 75 | |
| | | | | 10, 11 | | | 100 | |
| | | | | 9 | 04, 05 06, 07 | | 60 | |
| | | | | 10, 11 | | | 80 | |

1/ Guaranteed by design.

2/ Subgroups 10 and 11 are guaranteed if not tested to the limits as specified in table I herein.

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|-----------------|-----------------|----------------|----------------|
| Device types | 01 - 07 | 01 - 07 | 01 - 03 |
| Case outlines | H | P | 2 |
| Terminal number | Terminal symbol | | |
| 1 | V _S | V _S | NC |
| 2 | INPUT | INPUT | NC |
| 3 | NC | NC | V _S |
| 4 | GND | GND | NC |
| 5 | NC | GND | NC |
| 6 | NC | OUTPUT | INPUT |
| 7 | GND | OUTPUT | NC |
| 8 | OUTPUT | V _S | NC |
| 9 | OUTPUT | --- | GND |
| 10 | V _S | --- | NC |
| 11 | --- | --- | NC |
| 12 | --- | --- | NC |
| 13 | --- | --- | GND |
| 14 | --- | --- | NC |
| 15 | --- | --- | OUTPUT |
| 16 | --- | --- | OUTPUT |
| 17 | --- | --- | NC |
| 18 | --- | --- | NC |
| 19 | --- | --- | V _S |
| 20 | --- | --- | NC |
| | --- | | |
| | --- | | |

NC = No connection

FIGURE 1. Terminal connections.

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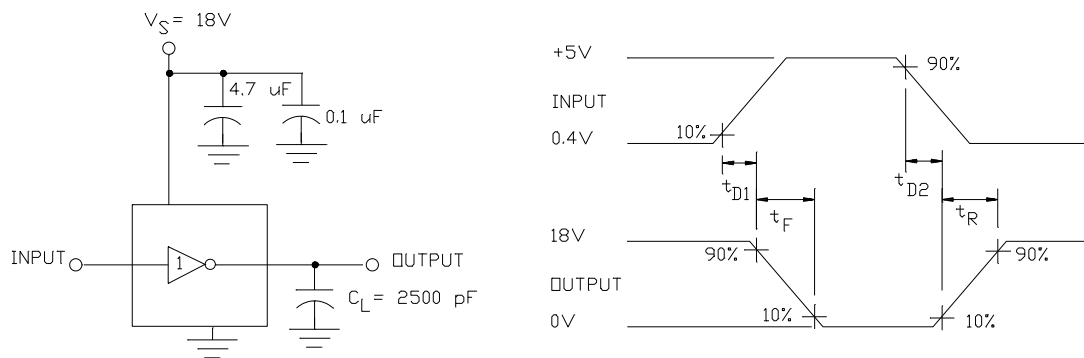


FIGURE 2. Inverting driver switching time.

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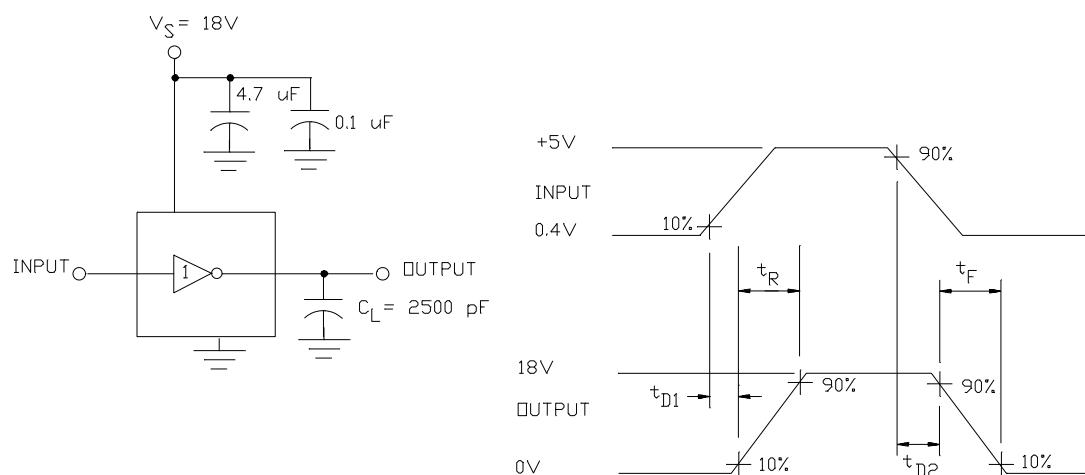


FIGURE 3. Noninverting driver switching time.

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3.6 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-BUL-103 (see 6.6 herein). The certificate of compliance submitted to DESC-EC prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-STD-883 (see 3.1 herein) and the requirements herein.

3.7 Certificate of conformance. A certificate of conformance as required in MIL-STD-883 (see 3.1 herein) shall be provided with each lot of microcircuits delivered to this drawing.

3.8 Notification of change. Notification of change to DESC-EC shall be required in accordance with MIL-STD-883 (see 3.1 herein).

3.9 Verification and review. DESC, DESC's agent, and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-STD-883 (see 3.1 herein).

4.2 Screening. Screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. The following additional criteria shall apply:

a. Burn-in test, method 1015 of MIL-STD-883.

(1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or acquiring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1015 of MIL-STD-883.

(2) $T_A = +125^\circ\text{C}$, minimum.

b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.

4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with method 5005 of MIL-STD-883 including groups A, B, C, and D inspections. The following additional criteria shall apply.

4.3.1 Group A inspection.

a. Tests shall be as specified in table II herein.

b. Subgroups 4, 5, 6, 7, and 8 in table I, method 5005 of MIL-STD-883 shall be omitted.

4.3.2 Groups C and D inspections.

a. End-point electrical parameters shall be as specified in table II herein.

b. Steady-state life test conditions, method 1005 of MIL-STD-883.

(1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or acquiring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1005 of MIL-STD-883.

(2) $T_A = +125^\circ\text{C}$, minimum.

(3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

| | | | |
|---|-------------------|-----------------------------|---------------------|
| STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444 | SIZE A | | 5962-88770 |
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TABLE II. Electrical test requirements.

| MIL-STD-883 test requirements | Subgroups (in accordance with method 5005, table I) |
|--|---|
| Interim electrical parameters (method 5004) | - - - |
| Final electrical test parameters (method 5004) | 1*, 2, 3 |
| Group A test requirements (method 5005) | 1, 2, 3, 9, 10**, 11** |
| Groups C and D end-point electrical parameters (method 5005) | 1 |

* PDA applies to subgroup 1.

** Subgroups 10 and 11, if not tested, shall be
guaranteed to the limits specified in table I.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-STD-883 (see 3.1 herein).

6. NOTES

6.1 Intended use. Microcircuits conforming to this drawing are intended for use for Government microcircuit applications (original equipment), design applications, and logistics purposes.

6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.

6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished in accordance with MIL-STD-973 using DD Form 1692, Engineering Change Proposal.

6.4 Record of users. Military and industrial users shall inform Defense Electronics Supply Center when a system application requires configuration control and the applicable SMD. DESC will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronics devices (FSC 5962) should contact DESC-EC, telephone (513) 296-6047.

6.5 Comments. Comments on this drawing should be directed to DESC-EC, Dayton, Ohio 45444, or telephone (513) 296-5377.

6.6 Approved sources of supply. Approved sources of supply are listed in MIL-BUL-103. The vendors listed in MIL-BUL-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DESC-EC.

| | | | |
|---|-------------------|-----------------------------|---------------------|
| STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444 | SIZE A | | 5962-88770 |
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STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN

DATE: 95-01-18

Approved sources of supply for SMD 5962-88770 are listed below for immediate acquisition only and shall be added to MIL-BUL-103 during the next revision. MIL-BUL-103 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DESC-EC. This bulletin is superseded by the next dated revision of MIL-BUL-103.

| Standard microcircuit drawing PIN | Vendor CAGE number | Vendor similar PIN <u>1</u> / |
|-----------------------------------|--------------------|-------------------------------|
| 5962-8877001HX | 60496 | MIC429AWBQ |
| 5962-8877001PX | 60496 | MIC429AJBQ |
| 5962-88770012X | <u>2</u> / | TSC429MNP/883 |
| 5962-8877002HX | 60496 | MIC4429AWBQ |
| 5962-8877002PX | 60496 | MIC4429AJBQ |
| 5962-88770022X | <u>2</u> / | TSC4429MNP/883 |
| 5962-8877003HX | 60496 | MIC4420AWBQ |
| 5962-8877003PX | 60496 | MIC4420AJBQ |
| 5962-88770032X | <u>2</u> / | TSC4420MJA/883 |
| 5962-8877004HX | 60496 | MIC4451AWBQ |
| 5962-8877004PX | 60496 | MIC4451AJBQ |
| 5962-8877005HX | 60496 | MIC4452AWBQ |
| 5962-8877005PX | 60496 | MIC4452AJBQ |

STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN - Continued

DATE: 95-01-18

| Standard microcircuit drawing PIN | Vendor CAGE number | Vendor similar PIN <u>1/</u> |
|-----------------------------------|--------------------|------------------------------|
| 5962-8877006HX | 60496 | MIC44R21AWBQ |
| 5962-8877006PX | <u>2/</u> | MIC44R21ALBQ |
| 5962-88770072X | 60496 | MIC44R22AWBQ3 |
| 5962-8877007HX | <u>2/</u> | MIC44R22AJBQ |

1/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

2/ Not available from an approved source of supply.

Vendor CAGE
number

60496

Vendor name
and address

Micrel Inc.
560 Oakmead Pkwy
Sunnyvale, CA 94086

The information contained herein is disseminated for convenience only and the Government assumes no liability whatsoever for any inaccuracies in this information bulletin.